

**Department of Marine & Wildlife Resources**  
**Report on the NMFS Logbook Program for the**  
**American Samoa Longline Fishery**  
**October-December 2003**

March 4, 2004

The Department of Marine and Wildlife Resources (DMWR) began processing the longline logbook data locally at the beginning of the year 2000 and very significant progress has been made to improve compliance of reporting requirements in the American Samoa longline fishery. Logbook data in this report are summarized by date of haul as shown in the following table. All submitted logbook data for longline activities during the fourth quarter of 2003 have been processed and are reported in this preliminary report. As of March 4, 2004, the documented delinquency rate according to the DMWR Daily Effort Census and Delinquency Reporting System for the fourth quarter of 2003 was 30.89%. The summary data in this report are considered preliminary and subject to change as additional delinquent data are received and processed. The fourth quarterly report is done earlier than the three others report of the year, and the high delinquency level can be explained by the lack of logs from big longliners which were fishing during the 4th quarter and which are still fishing.

According to the Daily Effort Census, 48 vessels were engaged in longline fishing during the fourth quarter of 2003 and 38 of these vessels turned in some or all of their longline logs for sets made during the quarter. These 38 vessels made 1,553 sets and set 3,858,949 hooks. Compared to the fourth quarter of 2002, this is about the same number of sets (but we must keep in mind that less than 70 % of the boats have turned their logs). The average number of hooks per set increased from 2,014 to 2,885. caused primarily by the relative increase in the activity of the large vessels in the fleet which set more hooks per set than the smaller alia fleet.

The total catch of all species decreased by 20.2%. Albacore continued to dominate the catch with only 70,237 fish caught in the fourth quarter of 2003. This is a light increase of 1.5% of the 69,210 albacore caught in the fourth quarter of 2002 and an increased of 12.0% of the albacore catch for the third quarter of 2003 (62,696). If the Albacore and the shark catches remain about the same, wahoo and yellowfin tuna catches increased of respectively 14.8 % and 14.6 %. Indeed catches of skipjack and mahimahi dramatically decreased of respectively 81.2% and 66.9 %. Bigeye tuna and billfish catches decrease also by respectively 6.3 % and 12.8 %.

The general CPUE has decreased by 35.8 % compared to one year ago value. This quarter, CPUE for all species have decreased over their year ago values. Albacore CPUE increased of 20.3% of its previous quarter value but decreased of 18.3% of its a year ago value to 18.20 fish per 1000 hooks in the fourth quarter of 2003. For this species, this is the lowest CPUE observed for a fourth quarter. The CPUE for skipjack (1.514) and mahimahi (0.196) decreased dramatically of respectively 84.9% and 73.4% from the quarter a year ago and if CPUE of skipjack remain far from his lowest level (0.781), CPUE for mahimahi is the lowest CPUE observed for a 4<sup>th</sup> quarter for this specie. CPUE of billfish decreased by 29.9%, to his lowest value for a 4<sup>th</sup> quarter (0.305). CPUE of bigeye decreased by 24.6%, and CPUE of sharks decreased by 18.0%. The catch rates of yellowfin and wahoo decreased less, respectively by 7.7 % and 7.6%.

## Western Pacific Logbook Summary Report for 4th Quarter 2003

Vessels landing or based in American Samoa

Based on Date of Haul for all areas

### TRIP INFORMATION

Number of Vessels:	38
Number of Sets:	1553
1000's of Hooks Set:	3859
Number of Lightsticks Used:	978

### CATCH INFORMATION

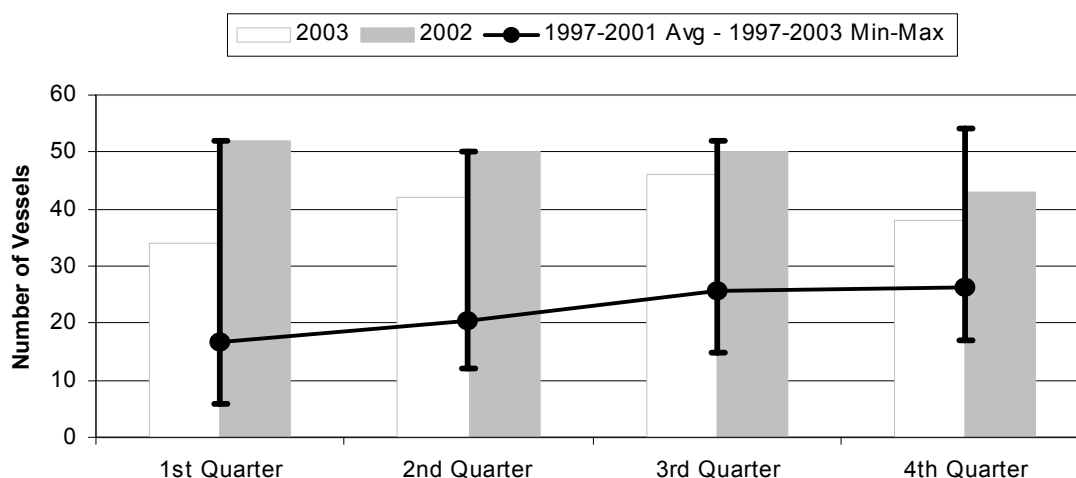
Species	# Caught	# Kept	# Finned	# Caught/ 1000 Hooks
<b>BILLFISH</b>				
Black marlin	6	0		0.00
Blue marlin	746	45		0.19
Striped Marlin	71	28		0.02
Sailfish	131	8		0.03
Spearfish	91	11		0.02
Swordfish	133	80		0.03
<b>TOTALS</b>	<b>1178</b>	<b>172</b>		<b>0.31</b>
<b>SHARKS</b>				
Blue shark	1951	16		0.51
Mako Shark	95	0		0.02
Thresher Shark	143	1		0.04
White-Tip Shark	332	0		0.09
Other Sharks	60	0		0.02
<b>TOTALS</b>	<b>2581</b>	<b>17</b>		<b>0.67</b>
<b>TUNA</b>				
Albacore	70237	70226		18.20
Bigeye Tuna	2454	2242		0.64
Bluefin Tuna	1	0		0.00
Skipjack Tuna	5842	4443		1.51
Yellowfin Tuna	4792	4525		1.24
<b>TOTALS</b>	<b>83326</b>	<b>81436</b>		<b>21.59</b>
<b>OTHER PELAGICS</b>				
Mahimahi	756	500		0.20
Moonfish	232	52		0.06
Oilfish	2821	27		0.73
Pomfret	329	48		0.09
Wahoo	5095	4742		1.32
<b>TOTALS</b>	<b>9233</b>	<b>5369</b>		<b>2.39</b>
<b>NON-PMUS</b>				
Other Pelagic Fish	867	1		0.22
<b>TOTALS</b>	<b>867</b>	<b>1</b>		<b>0.22</b>

# Western Pacific Logbook Summary of Protected Species Interactions for 4th Quarter 2003

For vessels landing or based in American Samoa  
Based on Date of Haul

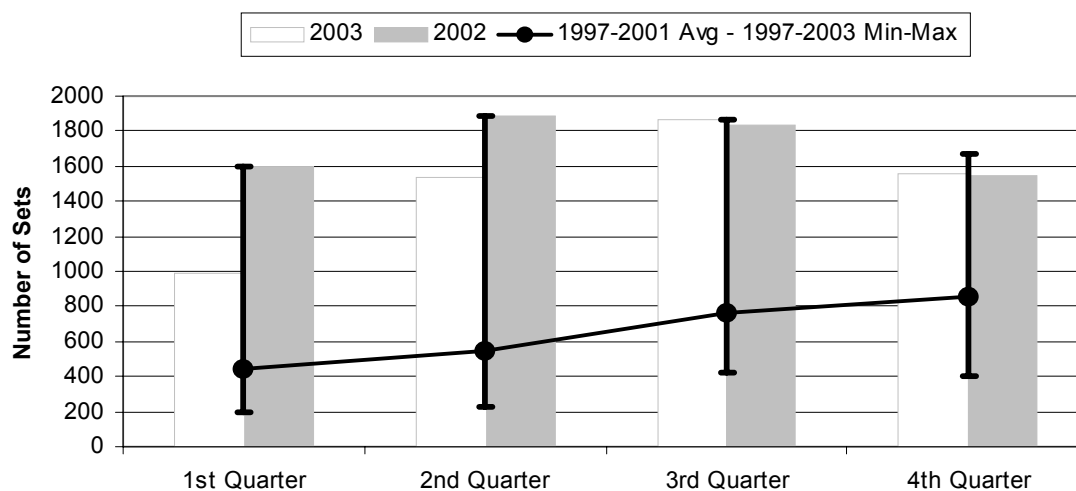
Species	Alive	Injured	Dead	TOTAL
<b>SEALS</b>				
Monk Seal	0	0	0	0
Sea Lion	0	0	0	0
Other Seals	0	0	0	0
TOTALS	0	0	0	0
<b>DOLPHINS</b>				
Bottlenose Dolphin	0	0	0	0
Spinner Dolphin	0	0	0	0
Other Dolphins	0	0	0	0
TOTALS	0	0	0	0
<b>WHALES</b>				
Humpback Whale	0	0	0	0
False Killer Whale	0	0	0	0
Other Whales	0	0	0	0
TOTALS	0	0	0	0
<b>TURTLES</b>				
Green Turtle	0	0	0	0
Leatherback Turtle	0	0	0	0
Loggerhead Turtle	0	0	0	0
Olive Ridley Turtle	0	0	0	0
Hawksbill Turtle	0	0	0	0
Hardshell Turtles	0	0	0	0
TOTALS	0	0	0	0
<b>BIRDS</b>				
Black-foot Albatross	0	0	0	0
Laysan Albatross	0	0	0	0
Short-Tailed Albatross	0	0	0	0
Moonfish	0	0	0	0
TOTALS	0	0	0	0

**Figure 1. American Samoa Longline Vessels Submitting Logs by Quarter for**



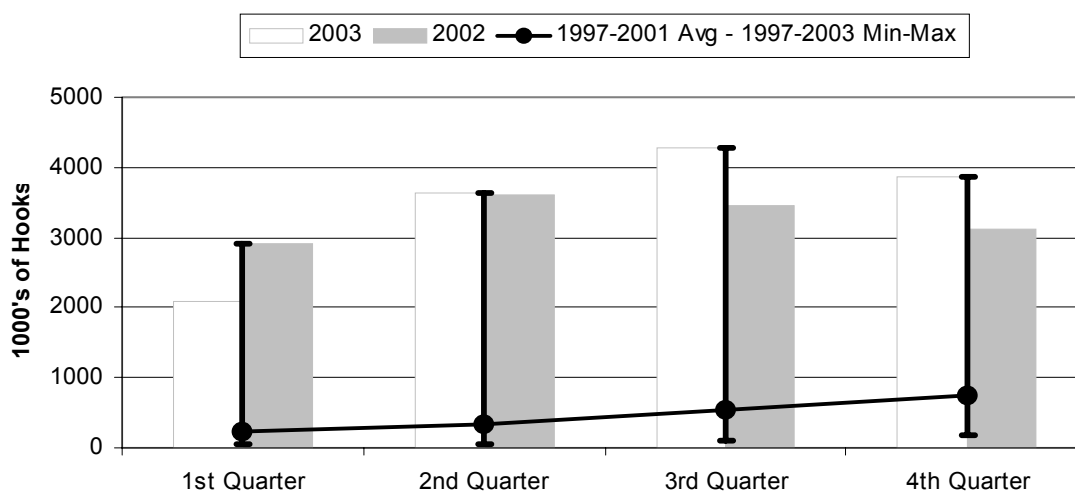
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	34	42	46	38
2002	52	50	50	43
1997-2003 Max	52	50	52	54
1997-2001 Avg	16.8	20.4	25.8	26.2
1997-2003 Min	6	12	15	17

**Figure 2. Number of Sets by American Samoa Longline Vessels by Quarter for**



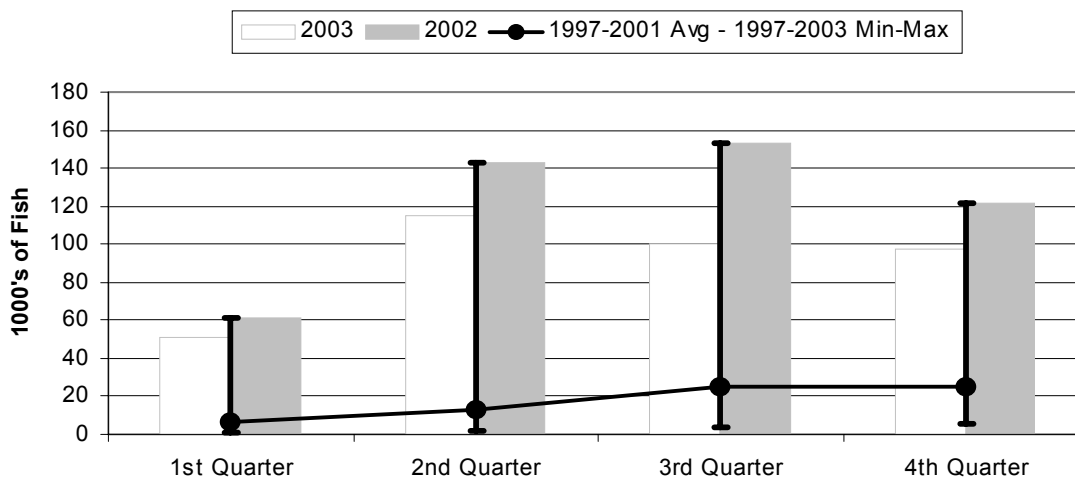
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	989	1541	1861	1553
2002	1602	1886	1831	1543
1997-2003 Max	1602	1886	1861	1665
1997-2001 Avg	441	543	766	854
1997-2003 Min	192	222	424	402

**Figure 3. Number of Hooks Set by the American Samoa Longline Fleet by Quarter for**



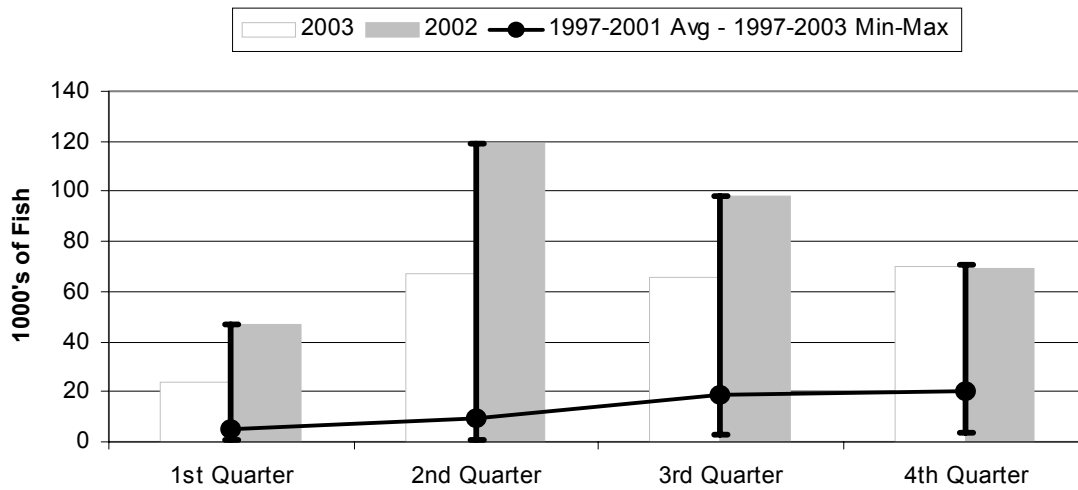
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	2093	3629	4267	3859
2002	2904	3613	3453	3107
1997-2003 Max	2904	3629	4267	3859
1997-2001 Avg	221	324	547	756
1997-2003 Min	41	51	102	175

**Figure 4. American Samoa Longline Total Catch (All Species) by Quarter for**



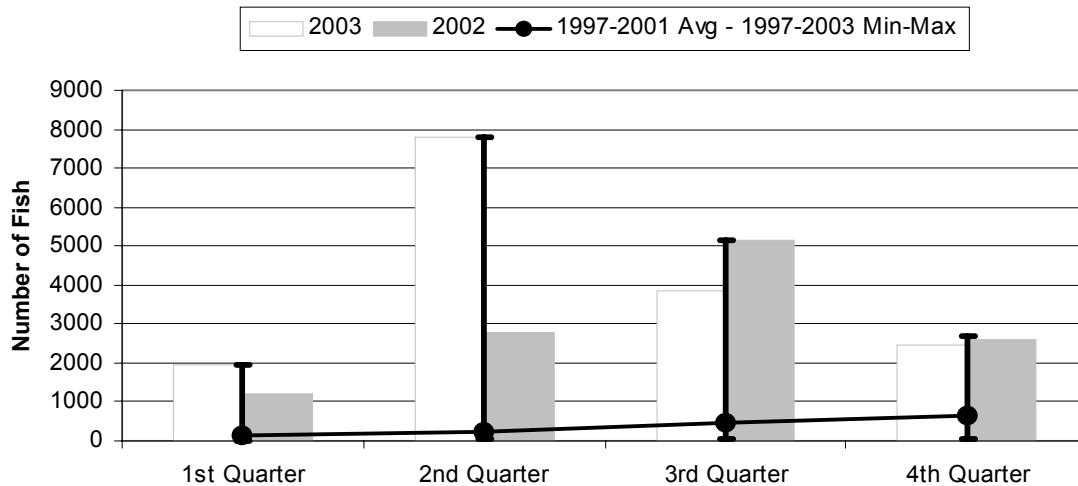
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	50.70	114.75	100.43	97.19
2002	61.24	142.60	153.23	121.83
1997-2003 Max	61.24	142.60	153.23	121.83
1997-2001 Avg	6.65	13.31	25.10	25.30
1997-2003 Min	1.32	1.41	4.13	5.20

**Figure 5. American Samoa Longline Albacore Catch by Quarter for**



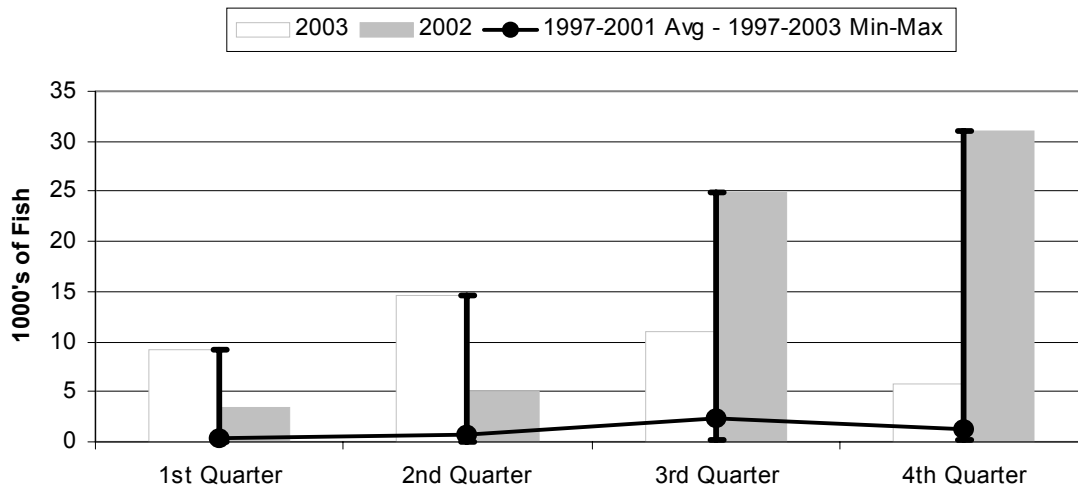
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	24.05	67.35	65.45	70.24
2002	46.98	118.99	98.03	69.21
1997-2003 Max	46.98	118.99	98.03	70.53
1997-2001 Avg	4.91	9.65	18.83	20.30
1997-2003 Min	0.94	0.85	3.18	3.47

**Figure 6. American Samoa Longline Bigeye Tuna Catch by Quarter for**



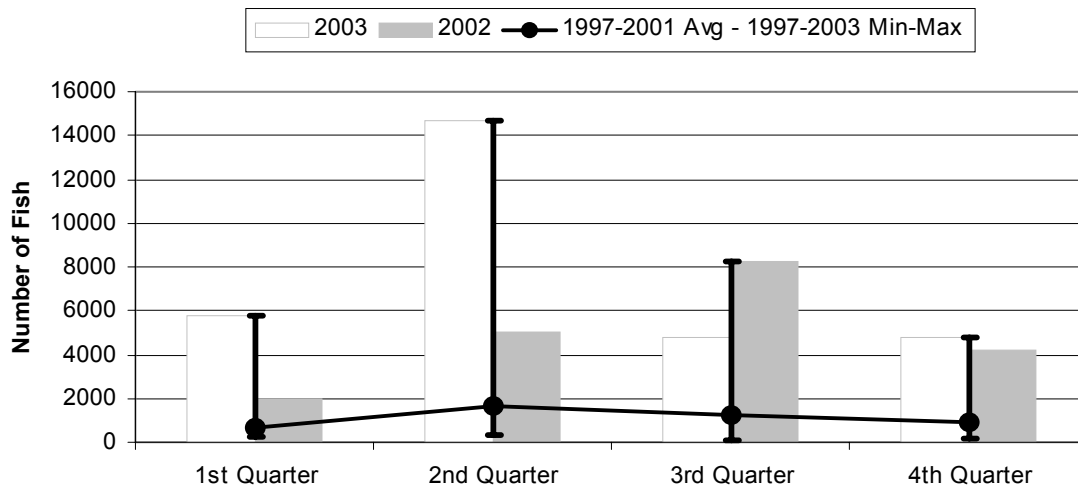
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	1946	7785	3831	2454
2002	1188	2798	5130	2619
1997-2003 Max	1946	7785	5130	2678
1997-2001 Avg	121	251	455	634
1997-2003 Min	6	26	55	55

**Figure 7. American Samoa Longline Skipjack Tuna Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	9.24	14.61	11.08	5.84
2002	3.37	4.99	24.86	31.11
1997-2003 Max	9.24	14.61	24.86	31.11
1997-2001 Avg	0.28	0.68	2.27	1.24
1997-2003 Min	0.00	0.01	0.24	0.18

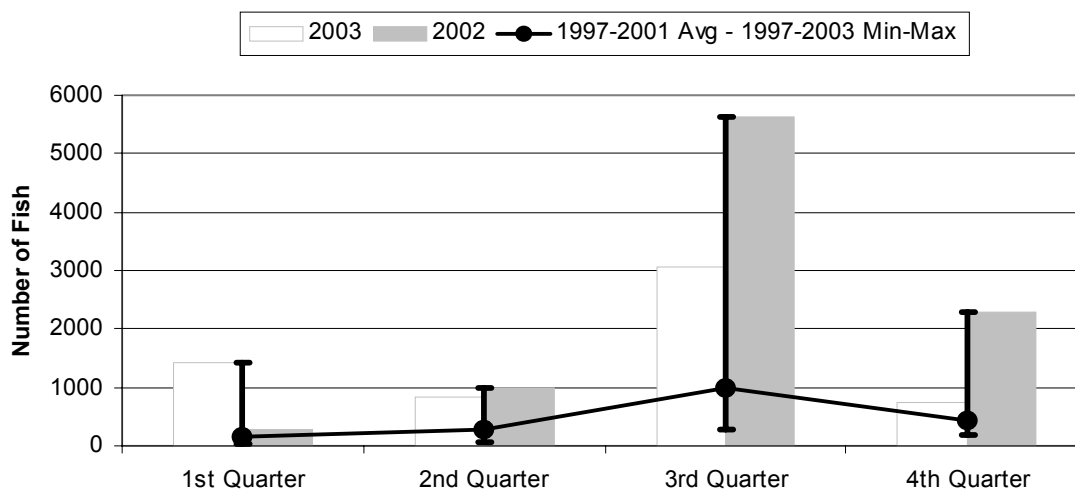
**Figure 8. American Samoa Longline Yellowfin Tuna Catch by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	5759	14681	4793	4792
2002	2017	5037	8241	4181
1997-2003 Max	5759	14681	8241	4792
1997-2001 Avg	669	1673	1212	874
1997-2003 Min	213	356	84	177

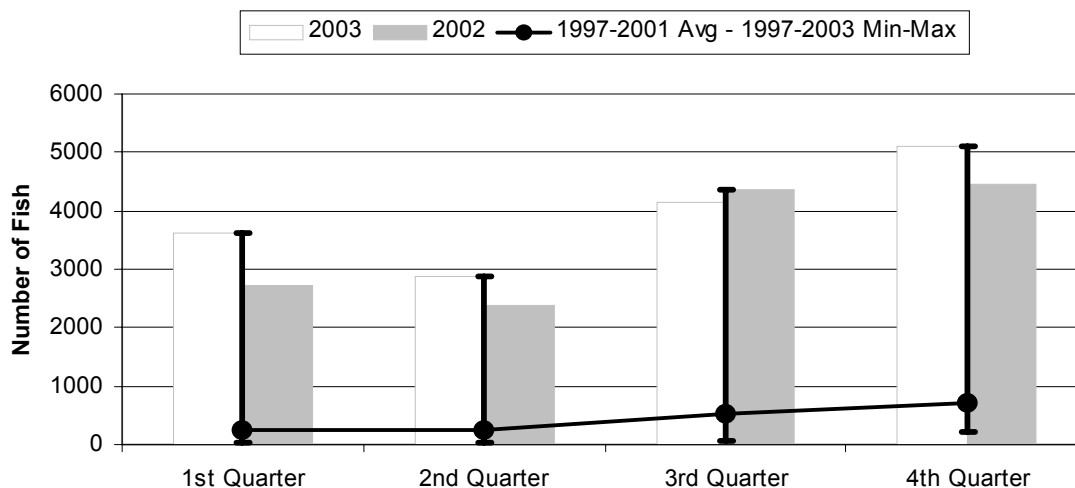


**Figure 9. American Samoa Mahimahi Catch by Quarter for**



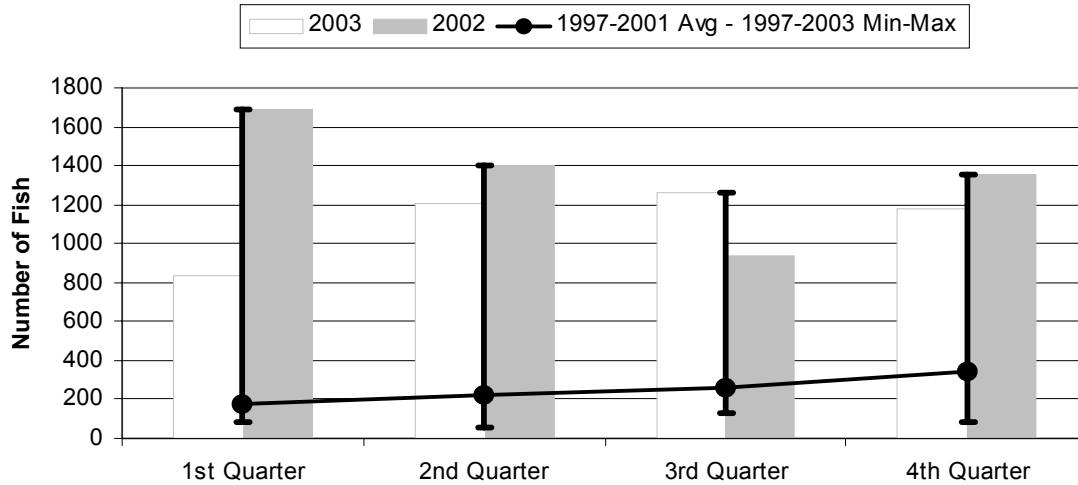
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	1433	847	3070	756
2002	263	979	5642	2287
1997-2003 Max	1433	979	5642	2287
1997-2001 Avg	141	265	987	445
1997-2003 Min	30	59	280	181

**Figure 10. American Samoa Wahoo Catch by Quarter for**



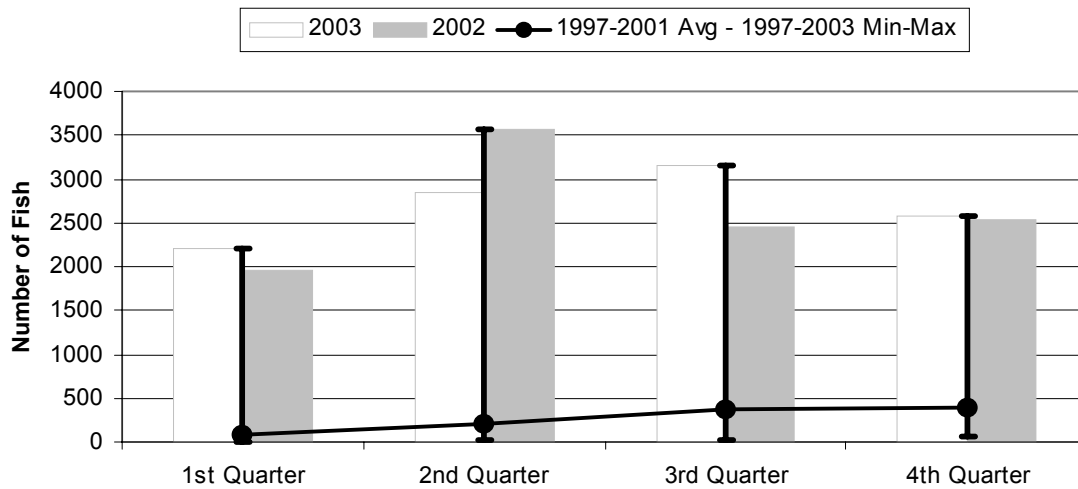
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	3615	2865	4141	5095
2002	2729	2394	4365	4440
1997-2003 Max	3615	2865	4365	5095
1997-2001 Avg	236	259	525	705
1997-2003 Min	27	20	68	209

**Figure 11. American Samoa Billfish Catch by Quarter for**



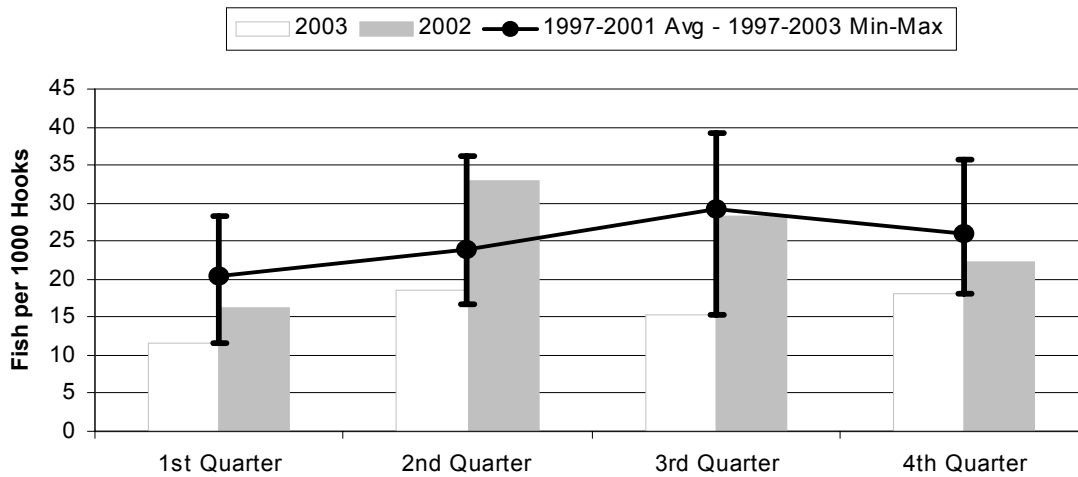
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	833	1207	1259	1178
2002	1692	1404	937	1351
1997-2003 Max	1692	1404	1259	1351
1997-2001 Avg	178	224	259	340
1997-2003 Min	83	58	132	84

**Figure 12. American Samoa Shark Catch by Quarter for**



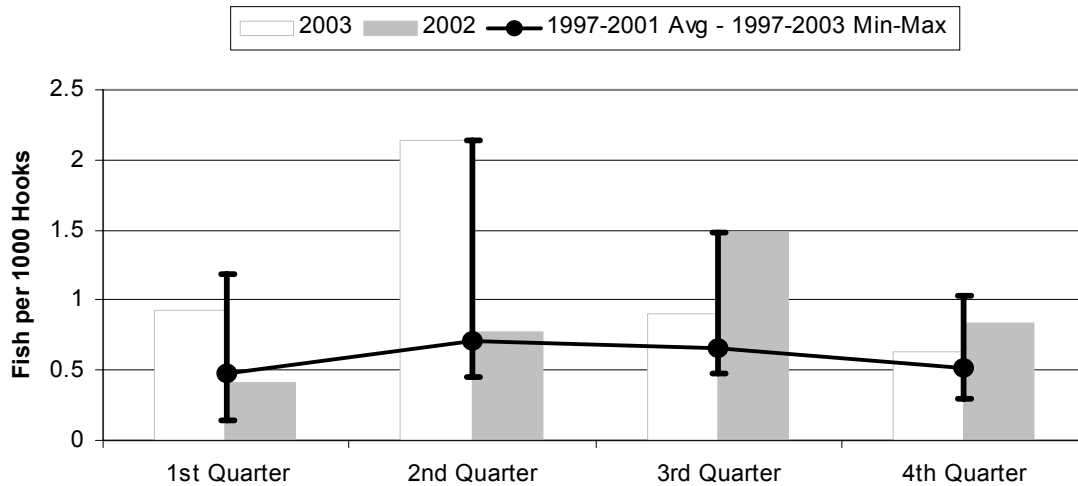
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	2200	2855	3153	2581
2002	1968	3562	2446	2535
1997-2003 Max	2200	3562	3153	2581
1997-2001 Avg	76	203	372	391
1997-2003 Min	5	15	26	59

**Figure 13. American Samoa Longline Albacore Catch/1000 Hooks by Quarter for**



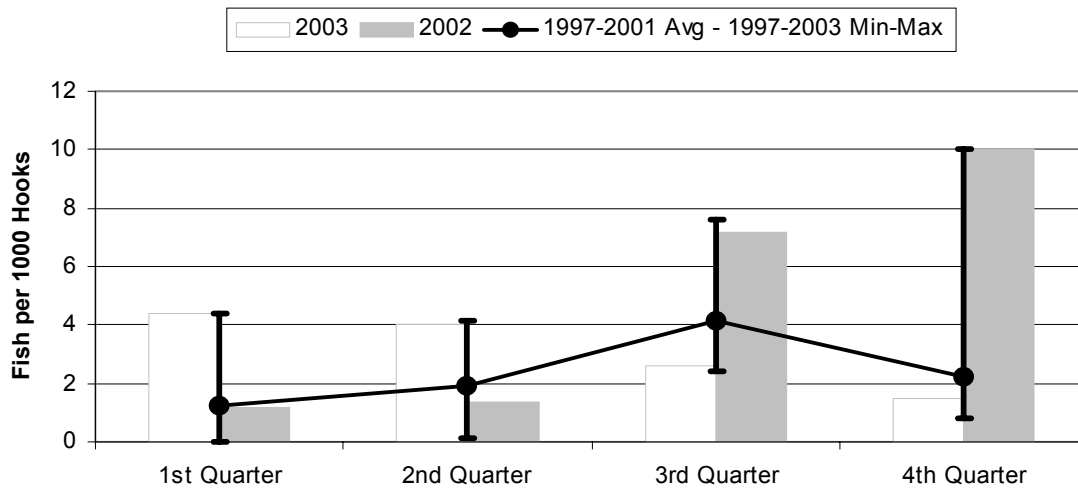
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	11.49	18.56	15.34	18.20
2002	16.18	32.93	28.39	22.27
1997-2003 Max	28.33	36.18	39.13	35.68
1997-2001 Avg	20.43	23.78	29.26	26.08
1997-2003 Min	11.49	16.80	15.34	18.20

**Figure 14. American Samoa Longline Bigeye Tuna Catch/1000 Hooks by Quarter for**



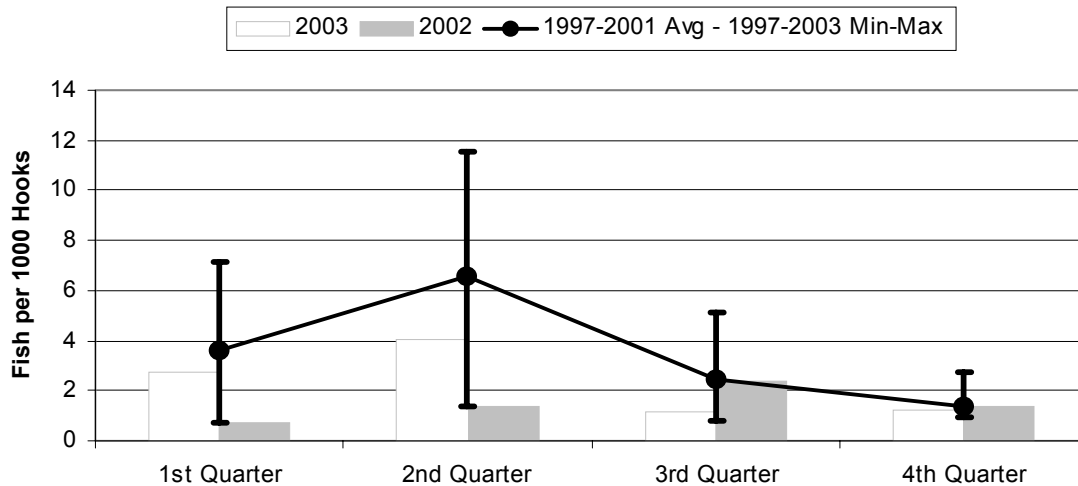
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	0.930	2.145	0.898	0.636
2002	0.409	0.774	1.486	0.843
1997-2003 Max	1.185	2.145	1.486	1.030
1997-2001 Avg	0.471	0.710	0.653	0.518
1997-2003 Min	0.146	0.452	0.479	0.294

**Figure 15. American Samoa Longline Skipjack Tuna Catch/1000 Hooks by Quarter for**



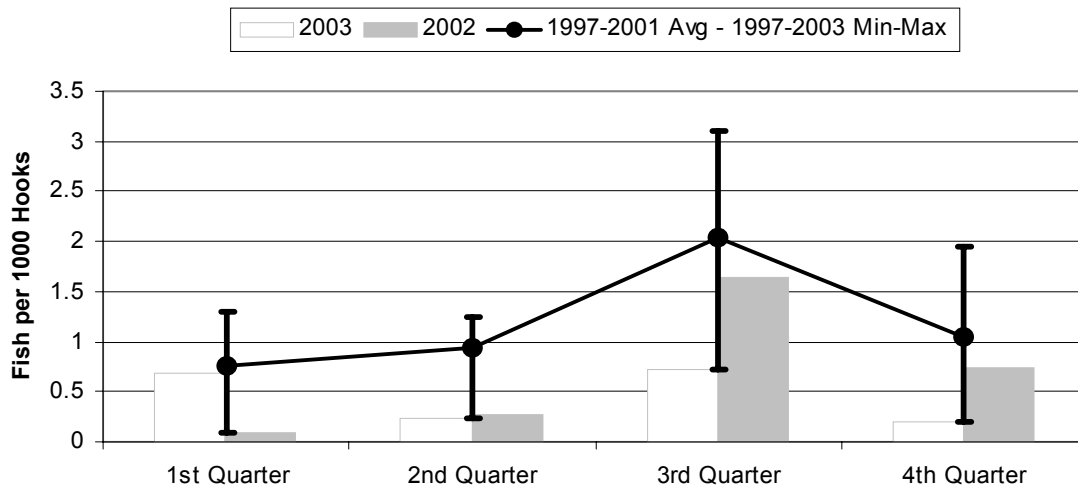
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	4.417	4.025	2.597	1.514
2002	1.160	1.380	7.199	10.01
1997-2003 Max	4.417	4.155	7.615	10.01
1997-2001 Avg	1.238	1.923	4.148	2.257
1997-2003 Min	0.000	0.119	2.399	0.781

**Figure 16. American Samoa Yellowfin Tuna Catch/1000 Hooks by Quarter for**



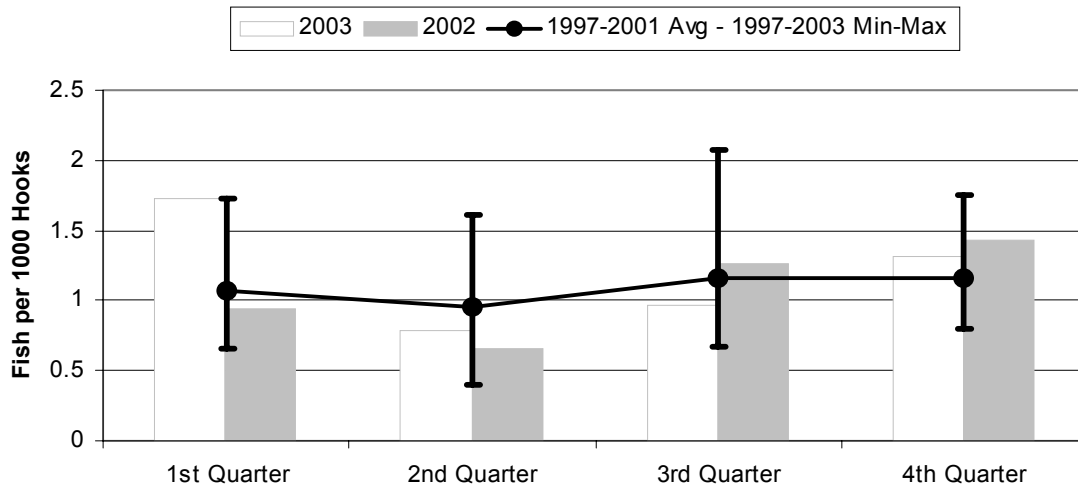
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	2.752	4.046	1.123	1.242
2002	0.695	1.394	2.387	1.346
1997-2003 Max	7.139	11.57	5.088	2.759
1997-2001 Avg	3.580	6.600	2.428	1.407
1997-2003 Min	0.695	1.394	0.826	0.968

**Figure 17. American Samoa Longline Mahimahi Catch/1000 Hooks by Quarter for**



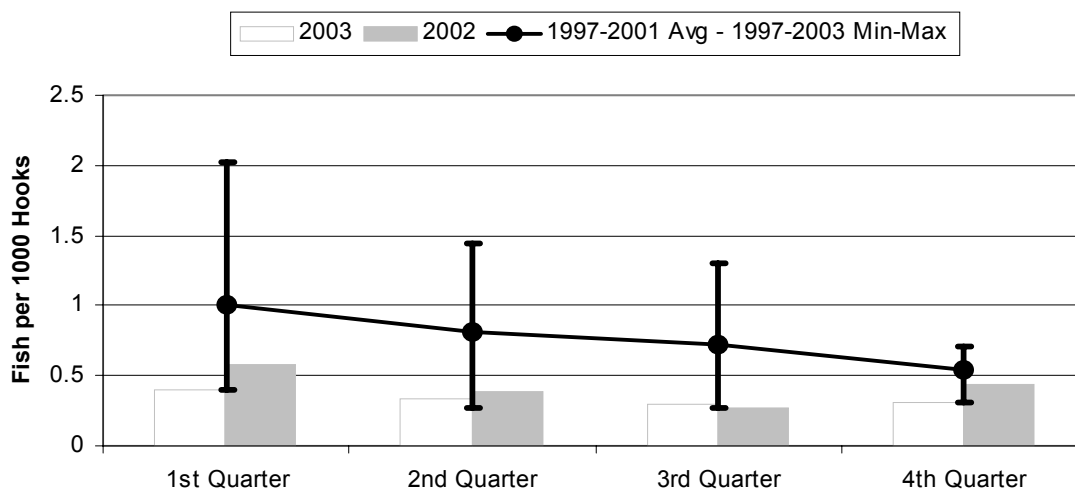
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	0.685	0.233	0.720	0.196
2002	0.091	0.271	1.634	0.736
1997-2003 Max	1.305	1.248	3.106	1.940
1997-2001 Avg	0.758	0.947	2.036	1.053
1997-2003 Min	0.091	0.233	0.720	0.196

**Figure 18. American Samoa Wahoo Catch/1000 Hooks by Quarter for**



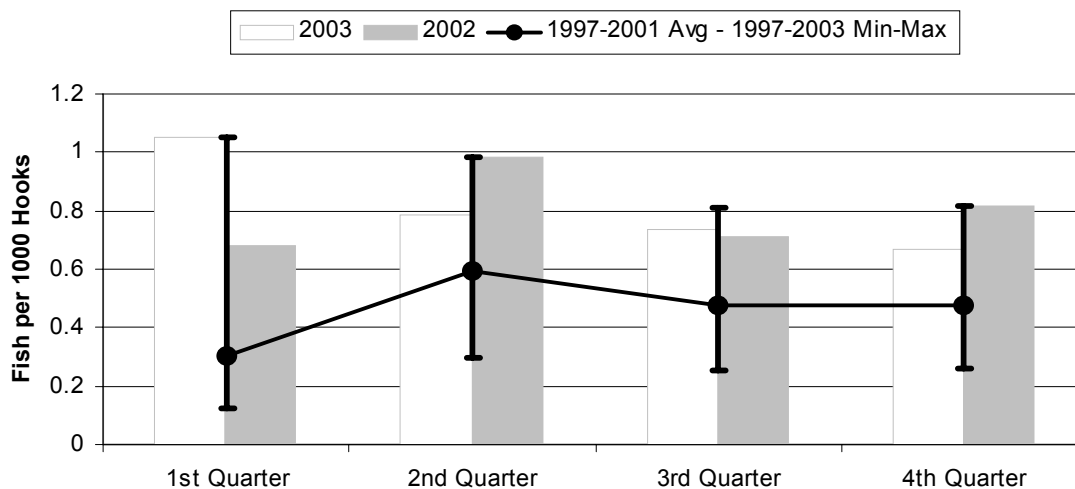
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	1.728	0.790	0.971	1.320
2002	0.940	0.663	1.264	1.429
1997-2003 Max	1.728	1.617	2.080	1.755
1997-2001 Avg	1.075	0.957	1.165	1.157
1997-2003 Min	0.657	0.396	0.669	0.803

**Figure 19. American Samoa Billfish Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	0.398	0.333	0.295	0.305
2002	0.583	0.389	0.271	0.435
1997-2003 Max	2.019	1.444	1.298	0.713
1997-2001 Avg	1.000	0.812	0.726	0.536
1997-2003 Min	0.398	0.268	0.271	0.305

**Figure 20. American Samoa Shark Catch/1000 Hooks by Quarter for**



	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
2003	1.051	0.787	0.739	0.669
2002	0.678	0.986	0.708	0.816
1997-2003 Max	1.051	0.986	0.810	0.816
1997-2001 Avg	0.301	0.595	0.477	0.475
1997-2003 Min	0.122	0.297	0.256	0.259